# Tacoma Narrows Bridge Project Nighttime Construction Noise Quarterly Report: July - September 2003

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#### INTRODUCTION

The Washington State Department of Transportation (WSDOT) and Tacoma Narrows Constructors have been issued a noise variance by the Tacoma-Pierce County Health Department. The variance was issued for noise levels expected to result from construction work between 10:00 p.m. and 7:00 a.m. in conjunction with the construction of the new Tacoma Narrows Bridge. The variance was issued with several conditions, including that WSDOT provide quarterly reports to the Health Department on activities relevant to the variance.

This is the third quarterly report and covers the period including July through September 2003. The following areas are addressed in this report:

- ?? Overview of Nighttime Construction Activities
- ?? Communication Activities
- ?? Complaint Response & Resolution
- ?? Upcoming Activities
- ?? Attachments
  - 1. Nighttime construction activities
  - 2. Public Mailings
  - 3. Citizen Contacts & Complaints

## OVERVIEW OF NIGHTTIME CONSTRUCTION ACTIVITIES: JULY - SEPTEMBER '03

Work activities took place on the project site between 10:00 p.m. and 7:00 a.m. on a total of 92 nights during the period including July, August, and September 2003. Of this total number of nights, there were 23 nights when specific construction activities took place, and 69 additional nights when activities were underway in the Narrows in support of the two new caissons.

Nighttime construction work during this period took place at several locations along the project's 3 ½ mile long project corridor from Jackson Avenue to 36<sup>th</sup> Street. Specific descriptions of the type, location, and times of this work are provided in Attachment 1.

During this period, 3 complaints were received by WSDOT about noise as a result of a construction activity taking place between 10:00 p.m. and 7:00 a.m.

The majority of work activities taking place between 10:00 p.m. and 7:00 a.m. during this period were in the Narrows in support of the two new caissons. The caissons were towed into place in the Narrows on July 21<sup>st</sup> and August 18<sup>th</sup>. Prior to the caissons coming on-site temporary anchors were being set to secure the caissons in place until they touchdown on the Narrows bottom. The caisson work sites are staffed 24 hours per day, 7 days per week. Two work shifts are scheduled on working days. Construction activities include barge operations, rebar installation, and concrete placement. During hours when construction work is not actively underway, workers on the site may be operating generators or maneuvering barges.

Regular concrete production, typically two or three times per week, began during this period at the temporary concrete batch plant. On six occasions during this period batch plant operations began before 7:00 a.m. On one occasion, due to a large and long concrete pour, the batch plant operated until 11:00 p.m.

Roadway work requiring temporary lane closures took place during nighttime hours in the area of the eastbound off ramp to Jackson Avenue (8 nights), the 24<sup>th</sup> Street bridge (2 nights), and on the SR 16 mainline near 36<sup>th</sup> Street (5 nights.)

The tie-in of a relocated City of Tacoma force sewer main required a temporary shut-down of the line during nighttime hours. This work was accomplished in one night.

#### **COMMUNICATION ACTIVITIES**

#### > INFORMATION & HOT LINE

A telephone information and "hot" line continues to be operational providing information about upcoming nighttime construction activities. It also provides residents an opportunity to communicate at any time of day with a live person about questions and/or concerns relating to the project nighttime construction activities and noise. This service operates 24 hours a day, 7 days per week. The phone number is 253-620-4440.

Nighttime construction activity information is provided in a recorded message, updated on a daily basis to provide the most current information. Messages can also be left on the information line concerning the nighttime construction activities and these messages will be responded to within 24 hours (on project working days).

Residents can also communicate directly with a person who can provide relevant information about project nighttime construction activities, accept comments, and if appropriate, directly contact WSDOT project staff. When project construction activities are taking place, the person staffing the "hot line" is able to immediately contact WSDOT project staff and to relay comments/complaints received. If requested by the caller, WSDOT project staff will return the call as soon as feasible.

#### > WEBSITE

To maximize public access to timely information about nighttime construction activities, a section of the project's web site is dedicated to providing quick, easy access to information concerning nighttime construction activities. Information on this web site is updated daily to provide the most current information.

Comments and concerns about the nighttime construction activities can be submitted to project staff through the web site and will be responded to within 24 hours (on project working days).

#### > POSTAL CARRIER ROUTE MAILINGS

As described in the Communication Plan for Nighttime Construction Noise, information sheets have been delivered by postal carrier routes to residences and businesses in and surrounding the project corridor.

Prior to each calendar month, residents along the project corridor have been mailed notification flyers about nighttime work activities scheduled to take place throughout the upcoming month.

If activities scheduled and described in the monthly notification change, residents located in the specific geographic area (work zone) of nighttime construction work have been mailed an updated notification of rescheduled activities. Updated flyers have been mailed four times during this period.

Copies of the notification flyers distributed during this period are provided in Attachment 2.

#### **COMPLAINT RESPONSE & RESOLUTION**

During this quarter (July - September '03), WSDOT received 3 complaints attributable to noise from a project construction activity occurring between 10:00 p.m. and 7:00 a.m.

Attachment 3 includes the Construction Noise Database entry sheets from these contacts as well as copies of relevant e-mail correspondence.

#### July 7 & 8 - Narrows Creek Townhomes

A complaint was received on July 9<sup>th</sup> from a resident of the Narrows Creek Townhomes about noise and vibrations during the nights of July 7<sup>th</sup> and 8<sup>th</sup>. During the week of July 7<sup>th</sup> roadwork was taking place on the eastbound mainline of SR 16 between the Narrows and Jackson Avenue. This work required the temporary closure of a lane of traffic on SR 16. So as to avoid excessive traffic backups on SR 16 these temporary lane closures are restricted to nighttime hours. The vibrations experienced were explained to be from the vibratory compaction equipment used in the placement of the roadway material.

Roadwork will continue on the Tacoma side of the Narrows during the 2004 construction season. Additional nighttime work will be necessary at that time to construct and implement the temporary roadway configurations.

#### July 23 – Stone Drive

A complaint was received from a resident on  $16^{th}$  Avenue Court (above Stone Drive in the Weatherswood neighborhood) about construction work starting adjacent to their residence before 7:00 a.m. Follow-up with Tacoma Narrows Constructors determined that a crew working on retaining wall #7 was trying to make the most use of available daylight and started work between 6:00-7:00 a.m. It was identified that this work activity is not covered by the noise variance and thus should not be initiated prior to 7:00 a.m. The starting time for this work crew was adjusted to 7:00 a.m.

### September 5 – 14<sup>th</sup> Ave.

A complaint was received from a resident of the Narrows View Condos (off 14<sup>th</sup> Avenue) about noise from trucks backing up in the area of the temporary concrete batch plant and also an alarm from a barge in the Narrows. The response, including a description of the OSHA required safety back-up alarms, is included in Attachment 3.

#### **UPCOMING ACTIVITIES**

During the upcoming quarter, October - December '03, construction activities will continue throughout the project site along the SR 16 corridor from Jackson Avenue to the vicinity of 36<sup>th</sup> Street.

During October, roadway work along SR 16 will be taking place during nighttime hours on the Pierce County side of the Narrows. This work, including installation of drainage culverts across the SR 16 roadways and the tie-in of new ramps at 24<sup>th</sup> St. and 36<sup>th</sup> St., will take place during nighttime hours due to the need for the temporary closure of traffic lanes on SR 16.

Concrete production will continue at the temporary batch plant typically two to three times per week. Concrete pours will be at both caisson locations in the Narrows and the Tacoma side anchorage site. The majority of concrete production will take place between 7:00 a.m. and 10:00 p.m., but some pours will start earlier and may continue later due to the magnitude of the pours as described in the noise variance.

Work activities in the Narrows will continue at both new caisson locations. Two daily work shifts will be conducted, possibly six days per week. The caisson work sites will be staffed 24 hours per day, 7 days per week. Both caissons are scheduled to touchdown on the Narrows bottom during December. After touchdown dredging operations will begin so as to imbed the caissons in the Narrows.